

# **Principle of Statistics**

## **Question Bank**

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**Lecture: Parzhin Anwer Mohammed**

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**Q1\** The following data represent person's number of family in small town.  
**3, 5, 8, 10, 12, 2, 7, 5, 11, 9, 5, 6, 13, 15, 12, 4, 5, 4, 3, 5**

**Find:**

- 1- Frequency distribution table    2- Center of Classes (Mid-point)

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**Q2\** A/ Define in brief.

- 1- Sample.    2- ordinal variable    3- finite (countable) Population  
4- statistics

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B/ What are the types of Quantitative variables?

**Good luck**

**Lecture**

**M.Parzhin A.Mohammed**



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**Q1\** The following data represent weight (30) children from a small town.

20, 10, 8.6, 7, 5.9, 6, 12, 8, 14, 5, 9, 10.5, 25, 16, 19, 20.9, 7.8, 15, 18,  
24, 9, 7, 15, 16.9, 11, 8, 26, 17.6, 21, 10

**Find the frequency distribution table and midpoint (classes of center)?**

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**Q2\** A/ Define in brief.

- 1- Population    2- Non- Random Sample.    3- Qualitative variables  
4- Inferential statistics

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**B / If you have (4) person ..... A, B, C, D.**

**How many way you select (2) person for (4)?**

**Good luck**

**Lecture**  
**M.Parzhin A.Mohammed**

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Ministry of Higher Education & Scientific  
Research  
Salahaddin University-Erbil  
College of Administration and Economics  
Department: Economics  
Stage: First



Subject: Principle of Statistics  
Date: / 6 / 2022  
Time: 2 Hours

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**Q1\\ Define in brief.**

**(10Marks)**

- 1- Descriptive statistics.    2- Population    3- Variable    4- Continuous variables  
5- Random sample

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**Q2\\ A/ The following data represent eyes color for 13 students:**  
**(20Marks)**

**(Blue, Brown, Green, Black, Brown, Green, Black, Brown, Black, Blue, Black, Green, Black.). Find a frequency distribution for the above data?**

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**B/**

- 1- What are the Methods of Collecting the Data?  
2- What are the types of random sample?

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**Q3\\ The following data represent person's number of family in small town:**  
**(20 Marks)**

3, 5, 8, 10, 12, 2, 7, 5, 11, 9, 5, 6, 13, 15, 12, 4, 5, 4, 3, 5



- Find:**
1. Frequency distribution Table?
  2. Center of class (Mid point)?
- 

**Q4\**

(10 Marks)

A Homogeneous statistical community with only (4) four numbers (ABCD), A **simple random sampling** of three (3) items is required. What is the number of possible samples to be chosen from this community and what is the probability of choosing any one?

**Good Luck**

**Parzhin A. Mohammed**  
Lecturer

**Dr. Baxter S. mohammed**  
Head of department

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Higher Edu. and Sci. Research  
Ministry  
Salahaddin University  
College of Administration &  
Economic  
Department: Economics

Subject: Principle of Statistics  
Stage: First  
Time: 2 Hours  
Date: / /2023

**Final Exam - Second Semester:  
Second Trial  
2022– 2023**

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**Q1\** From the following frequency table.

(15Marks)

Classes	2-3	4-5	6-7	8-9	10-11
fi	3	1	2	1	1

**Find:** 1. Mean.                      2. Median                      3. Range

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**Q2// A/ Define** (20 Marks)

1- Statistics    2-Variable    3- Random Sample    4- Nominal Variables    5- Population

**B/ What are the types of Samples and define each one?**

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**Q3\ From the following data** (10Marks)

FM, M, M, FM, M, FM, M, M, M, M, FM, M, FM, FM, FM, M

**Find:**

1. Frequency distribution table?
  2. Bar chart?
- 

**Q4\ from the following Frequency table.** (15 Marks)

Classes	5-9	9-13	13-17	17-21	21-25	25-29
$f_i$	9	6	5	6	2	2

**Find:** 1- Center of class (midpoint)?  
2-Ascending Cumulative Frequency distribution (ACF)?  
3-Relative Frequency?

**Good Luck**

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Dr. Bakhtyar S. Mohammed

Head of Department

L.Isra M. Ali

Examiner

L. Parzhin A. Mohammed

Examiner



**Q1**\\ The following data represent weight (30) children from a small town.

120	110	108.6	107	105.9	106	112	108	114	105
109	116.5	125	116	119	120.9	107.8	115	118	124
109	107	115	116.9	111	108	126	117.6	121	110

**Find:**

- 2- Frequency distribution table 2- Relative frequency 3- Center of Classes (Mid-point) 4- Ascending Cumulative Frequency distribution (ACF).

**Q2**\\ A/ Define in brief.

- 2- Population. 2- Random samples 3- variable 4- Infinite (uncountable)Population

B/ What are the types of Quantitative variables?

**Good luck**

**Lecture**

**M.Parzhin A.Mohammed**

**Q1**\\ Answer the following questions.

(10 Marks)

- 2- What are the differences between Qualitative variable and Quantitative variable .cite example for each.  
3- What are the types of Non- Random sample?

**Q2\ A/** Select (4) students out of (24) students by use systematic sampling.  
(20 Marks)

**B/** from the following data **5, 7, 9, 11, 13, 15, 17.**

Find: 1. Range 2. Variance ( $S^2$ ).

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**Q3\** The following data represent person's number of family in small town.  
(20 Marks)

**3, 5, 8, 10, 12, 2, 7, 5, 11, 9, 5, 6, 13, 15, 12, 4, 5, 4, 3, 5**

**Find:** 1. Frequency distribution Table?

3. Center of class (midpoint)?

4. Ascending Cumulative Frequency distribution (DCF)?

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**Q4\** Draw a **frequency histogram** to illustrate the following frequency distribution.

(10 Marks)

<b>Classes</b>	2-5	5-8	8-11	11-14	14-17
<b>fi</b>	5	7	3	4	1

**Good Luck**

**Parzhin A. Mohammed**  
Lecturer

**Assist. Prof .D. Mahabad N. Abdulla**  
Head of department



**Q1**\\ from following data  
 (15Marks)

Class	10 -20	20 - 30	30 - 40	40 - 50	50 - 60
fi	2	4	6	8	5

Find: 1- Mean( $\bar{X}$ )                      2- Median(me)                      3-Harmonic mean(H.m)

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**Q2**\\ the following data represent weight (30) children from a small town.  
 (15 MARKS)

20□	10□	8.6	7□	5.9□	6□	12□	8□	14□	5□
9□	10.5□	25□	16□	19□	20.9□	7.8□	15□	18□	24□
9□	7□	15	16.9	11	8	26	17.6	21	10

Find\\ 1- Frequency distribution.                      2- Relative frequency.                      3- Mid points of the classes.  
 4- Descending cumulative frequency distribution (Fi).

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**Q3**\\A\\The following data represent eyes color for 10 student .  
 (10 Marks)

Blue, brown, black, brown, black, brown, black, Blue, black, black. Draw the pie chart.

**B**\\ If you have ten ball (1 , 2 , 3 , .....,10 ),How many way you select (5) ball for (10) ?

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**Q4**\\Fromfollowingdata. (10 Marks)

$$x_i = 2, 4, 5, 8, 3$$

$$y_i = 1, 2, 3, 2, 3$$



Find: 1-  $(\sum_{i=1}^n x_i)^2$  2-  $\sum_{i=1}^n \frac{1}{x_i}$  3-  $\sum_{i=1}^n (x_i - 4)(y_i - 3)$  4-  $\prod_{i=1}^n \frac{x_i}{y_i}$   
 5-  $\prod_{i=1}^n 3$

**Q5\ A/** Define in brief. (10 Marks)  
 1- Infinite (uncountable) Population. 2- Sample 3- Inferential statistics.

**B/** 1- what are the Sources of Collecting the Data?  
 2- What are the types of Quantitative variables?

**Parzhin Anwer Mohammed**  
 Lecturer

**Good Luck**

**Assist. Prof .D. Sami Sabr Abdulla**  
 Head of department

Ministry of Higher Education & Scientific Research  
 Salahaddin University-Erbil  
 College of Administration and Economics  
 Department: tourism  
 Stage: First Year

Subject: principle of statistics  
 Date: / 6 / 2020  
 Time: 3 Hours

Final Exam: second Trial  
 2019 – 2020

**Q1\** following data represent the weight of (30) student (15 MARKS)

23	55	17	42	59	40	43	18	28	36	31	32	28	19
24	26	38	34	29	30	22	57	45	48	20	21	39	45

Find\ 1- Frequency distribution 2- relative frequency 3- Ascending cumulative frequency

**Q2\** from following data (15marks)

classes	3 - 9	9 – 15	15 – 21	21 – 27	27-33	33-39
Fr	10	12	8	6	3	1

Find : 1 – mean (x) 2- median(me) 3- polygon frequency 4- mode(mo)

**Q3\**  
 (15MARKS)



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$X_i = 8, 5, 6, 10, 9, 4, 7, 12, 4, 15$

Find 1- mean( $\bar{x}$ )      2- median      3- standard deviation (S)      4 – mean deviation(x)

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Q4\if you know number of student in department of tourism      (5marks)  
First stage: 200 second Stage: 250 third Stage: 300 forth stage: 150 percentage by pie chart

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Q5\ from the following data  
(10 marks)

xi =	8	6	10	5	9	4	7	12	4	15
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Find 1- C.V      2- Mode(mo)

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**Good Luck**

Parzhin Anwer Mohammed  
Lecturer

Assist. Prof .mahabad nori  
Head of department

**Q1\ the following data represent persons number of family in small town.**

**3, 5, 10, 12, 2, 7, 5, 11, 9, 5, 6, 13, 15, 12, 4, 5, 4, 3, 5, 8**

**Find:** 1-frequency distribution table. 2-Descending cumulative frequency (DCF)  
3- Draw the frequency histogram.

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**Q2\ A/ Define in brief.**

- 1- Statistics. 2- Population. 3- Quantitative variables 4- Variable.
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**B/** Suppose there **32** elements in the population and a sample of **8** elements is needed (by using Systematic random sampling) ?

**Good luck**

**Lecture**

**M.Parzhin A.Mohammed**

Ministry of Higher Education & Scientific Research  
Salahaddin University-Erbil  
College of Administration and Economics  
Department: Administration



Subject: Principle of Statistics

Date: 10 / 1 / 2024

Time: 2 Hours

Stage: First

Final Exam- First semester: First Trial 2023- 2024

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**Q1**\\ From the following frequency table.  
**Marks)**

**(20**

classes	2-4	4-6	6-8	8-10	10-12
fi	4	5	6	3	2

**Find:** 1. Mean ( $\bar{x}$ ). 2. Median (Me) 3. Mode (Mo) 4. Harmonic mean ( $\bar{H}$ )

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**Q2**// Answer the following question  
**Marks)**

**(15**

1- What are the differences between Ordinal variable and nominal variable .cite example for each?

2- What are the types of Random sample?

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**Q3**\\ From the following data.

**(15Marks)**

Female, Male, Male, Female, Male, Female, Male, Male, Male, Male, Female,  
Male,

Female, Female, Female, Male

**Find:** 1. Frequency table. 2. Relative frequency. 3. Draw the Bar chart.

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**Q4\ A/**From the following data:  
**Marks)**

**(10**

$$x_i = 2, 3, 5, 6, 3$$

**Find:** 1.  $\sum_{i=2}^5 x_i$  2.  $\sum_{i=1}^5 (x_i + 2)$  3.  $\sqrt{\sum_{i=1}^5 x_i}$

B/ The mean weight of 9 items is (15) if one more item is added to this series , the arithmetic mean becomes (16) ; find the values of the 10<sup>th</sup> item.

**Good Luck**

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Lecturer

**Dr. Jwan S.Rashid**  
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